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Briefing—Statistical Data for International Trade in Services

ISSUES FOR DEVELOPING COUNTRIES

Statistical data for trade in services is important for a number of reasons. Data can help monitor the performance of services industries and aid in developing regulations to ensure service-related industries are competitive. Data can aid the evaluation of market access opportunities and help inform decisions on negotiating priorities and strategies. Data can aid in the comparison of commitments undertaken during negotiations and also in the assessment of liberalization achieved in specific services sectors. And data can provide statistical background for analyzing overseas markets and for settling disputes. However, statistical data for services is inherently more difficult to collect that data on trade in goods because services are typically defined through abstract concepts rather than by any physical attribute or physical function. The importance of services-related data has fuelled the development of a more comprehensive and better-integrated approach to statistical issues pertaining to trade in services. That approach is embodied in the Manual on Statistics of International Trade in Services (MSITS).

Background

Services are central to economic activity in the modern economy. Innovation and efficiency in the production of services have become crucial to economic growth. One of the most important challenges for governments in today's economy is to ensure that regulations that effect the services sector support innovation and efficiency in the production of services. This does not imply eliminating all regulations, but reforming those regulations that are not well targeted at clear and objective social goals. To undertake such reform, governments must have access to accurate, comprehensive and detailed statistical data on trade in services.

The current round of multilateral trade negotiations on services under the auspices of the World Trade Organization (WTO) can make a major contribution to liberalizing trade in services. Ideally, a framework would be negotiated to allow maximum competition within a market-oriented framework, while at the same time enabling the public and private sectors to work cooperatively to achieve important social objectives. To do so, governments and the private sector must have access to accurate, comprehensive and detailed statistical data on trade in services.

The lack of comprehensive and reliable statistical data for trade in services can impede the development of effective policies that promote innovation and protect social objectives. The lack of comprehensive and reliable statistical data can also impede the current round of multilateral trade negotiations that may, in turn, hinder the ability of countries to achieve maximum levels of economic growth.

The need for services-related statistical data has fuelled the demand for development of a more comprehensive and better-integrated approach to statistical issues pertaining to trade in services. And

while statistics for the international trade in services has lagged behind the reality of the marketplace, there is a new drive to have governments correct the data imbalance and to arm themselves with more appropriate statistical tools for economic analysis and policy making to match there needs, whether in economic development or trade negotiations.

What is being done to enhance data collection?

The draft *Manual on Statistics of International Trade in Services* (MSITS) represents an important advance in providing a clearer, more detailed and more comprehensive system for the measurement of trade in services.

The recommendations for data collection set forth by MSITS is founded on work conducted jointly by the International Monetary Fund (IMF), the Organization for Economic Co-operation and Development (OECD), the Statistical Office of the European Communities (Eurostat), the United Nations (UN), the United Nations Conference on Trade and Development (UNCTAD) and the World Trade Organization (WTO).

The MSITS was prepared to address the needs of a variety of producers and users of statistics on international trade in services. While it is primarily a guide for statistical compilers, it is also a useful tool for governments and international organizations that use statistical information in connection with international negotiations on trade in services. Furthermore, it can aid businesses and others that need to assess developments in international services markets.

Why better data for trade in services is needed

- Trade negotiators require statistics as a guide to negotiate specific commitments in trade in services and thereafter to monitor compliance and the resulting changes for each type of service.
- Statistics can aid the evaluation of market access opportunities, inform decisions on negotiating priorities and strategy, the comparison of commitments, the assessment of the extent of liberalization achieved in specific services and markets, and provide statistical background for the settling of disputes.
- Private business also needs the information in order to be aware of the possibilities offered by trade liberalization. The analysis of markets for whatever purpose also requires that trade data can be linked to output data, whether in terms of activities or of products.
- Better services trade data is also required for a wide range of analytical work and often constitute a key ingredient for economic analysis.
- Enhanced statistical indicators to help guide policymakers when formulating policy.

While the MSITS features important new areas in the field of international services statistics, it does so by building upon, rather than by modifying, internationally agreed standards for statistical compilation. It provides a framework and a set of recommendations that will allow for the provision of a range of statistics on international trade in services.

The MSITS provides recommendations (1) for better and more accurate collection of statistical data, (2) for increased classification of services, (3) for drawing on expertise and information spread among central banks, national statistical offices, and government ministries, and (4) for increasing the interoperability of current statistical sources for trade in data.

The MSITS proposes a phased approach to implementation so that countries, including those that are beginning to develop statistics on international trade in services, can implement the recommendations gradually and begin to structure available information in line with this new international standard framework. The sequence of recommendations takes into account the relative ease that many compilers may find in their implementation. However, the order of implementation is flexible enough to enable countries to meet the priority needs of their own institutions. Full implementation, to be seen as a long-term goal, would represent a considerable increase in the detail of information available on trade in services.

Constraints to Collecting Data for Trade in Services

There are numerous constraints under which statistical compilers operate whether in national statistics offices, central banks, or other institutions.

First, measurement of trade in services is inherently more difficult than measurement of trade in goods. Services are more difficult to define and are typically defined through abstract concepts rather than by any physical attribute or physical function. For trade in services there is no package crossing the customs frontier with an internationally recognized commodity code; a description of the contents; information on quantity, origin, and destination; an invoice; and an administrative system based on customs duty collection which would be helpful in assembling these data.

The required information on services trade, once defined, is dependent on reaching a common understanding of concepts with data providers. It depends on information that may be reported either from business accounting and record keeping systems or by individuals, and on a variety of data sources, including administrative sources, surveys, and estimation techniques.

The inherent difficulty in defining what needs to be measured and actually collecting that data also means that governments will face additional costs when collecting the data. When seeking to augment statistical information on trade in services, national agencies need to weigh the demand of users for more detail about services trade against the cost of collection, the burden of extra information provision on business, and the need for certain minimum quality thresholds. These constraints and considerations limit the amount of detail on international trade in services that it is practical to provide.

Another constraint concerns the traditional framework for statistical data for trade in services. The traditional statistical framework is comprised of a handful of international data sources. These include (each is described in more detail in the following section):

- The International Monetary Fund's Balance of Payments Manual (BPM5)
- The System on National Accounts 1993 (1993 SNA) which records the value of services delivered through locally established enterprises, commonly designated as *Foreign Affiliates Trade in Services* (FATS)
- UN *Central Product Classification (CPC)*
- The UN *International Standard Industrial Classification of All Economic Activities—Revision 3 (ISIC)*
- UN publication "International Merchandise Trade Statistics: Concepts and Definitions, Revision 2" (IMTS2)
- UN Recommendations on Statistics of International Migration
- *Tourism Satellite Account (TSA): Methodological References*
- Joint OECD-Eurostat *Trade in Services Classification*
- *OECD Benchmark Definition of Foreign Direct Investment—Third Edition (BD3)*

Many of these statistical data sources were created before the advent of the GATS Agreement and in many ways do not conform to the way in which the GATS defines services trade[1]. The GATS defines services trade according to the modalities through which services may be delivered, of which the GATS identifies four: *cross border, consumption abroad, commercial presence* and *presence of natural persons*.

Distinctions are made based on whether the service supplier, the consumer, or neither, moves from one country to another for the transaction to be effected. An important feature of services data collection therefore, concerns collecting data according to each of the four modes of supply. Although the current statistical framework addresses

[1] With the exception of the draft *Manual on Statistics of International Trade in Services* (MSITS) which seeks to building upon, rather than by modifying, internationally agreed standards for statistical compilation.

most of the four modes, there in a need for more detailed and accurate data collection for each of the four modes of supply. Such a framework needs to be agreed upon and implemented if accurate statistics for trade in services are to be developed.

In addition, many of these data sources do not include many of the new and emerging services that have been identified. Therefore increased coverage in the classification of these new and emerging services needs to occur if comprehensive and accurate statistical data for trade in services is to be collected. Also, many of the traditional sources for trade in services statistics:

- Aggregate data, which needs to be disaggregated in order to provide meaningful and accurate view of trade in services.
- Collect data in a way that does not complement other international or national data sources
- Do not comprehensively collect all the necessary data variables or elements.

Such constraints can effect the accuracy, comprehensiveness and detail of data on trade in services.

International Sources for Statistics in Trade in Services

Currently there are internationally agreed upon standards for measurement and compilation of international trade in services. However, efforts are needed to increase the compatibility, accuracy, comprehensiveness and detail of the current statistical systems and classifications.

As mentioned earlier, the MSITS attempts to resolve many of the constraints statisticians and national governments face when collecting statistical data for trade in services. The MSITS does so by building upon, rather than by modifying, the following internationally agreed standards for statistical compilation.

The System of National Accounts 1993

The System of National Accounts 1993[2] (1993 SNA) is an integrated system of accounts related to the economic activities and sectors of the economy of a country. Since enterprises in an economy supply services internationally through the activities of foreign affiliates abroad, the *1993 SNA* identifies "foreign-controlled corporations". These types of transactions are referred to as Foreign Affiliates Trade in Services (FATS).

The *1993 SNA* provides the definitions of a number of priority variables for trade in services data collection (gross output, employment, and value added) as well as the lower priority items (financial and non-financial assets, net worth, operating surplus, gross fixed capital formation, taxes on income, and compensation of employees). The *1993 SNA* also provides the definition of an enterprise, which is required for compiling the priority variable *number of enterprise*s.

However, the *1993 SNA* suggests that countries may wish to treat some "associated enterprises", which are enterprises in which the non-resident ownership is between 10 percent and 50 percent, as foreign-controlled. The GATS, on the other hand, defines foreign affiliates when ownership exceeds 50 percent. *SNA* statistics on foreign-controlled enterprises relate to what is usually termed *inward FAT*S, i.e. to enterprises operating in the compiling country that are controlled by non-residents. The *SNA* statistics for a given country do not provide information on *outward FAT*S, i.e. on enterprises established abroad that are controlled by residents of that country (though these enterprises would be covered by the *SNA* statistics of their respective host countries).

[2] Commission of the European Communities, International Monetary Fund, Organization for Economic Co-operation and Development, United Nations, and World Bank, *System of National Accounts 1993* (Brussels/Luxembourg, New York, Paris, Washington), 1993.

Balance of Payments Manual, Fifth Edition

The fifth edition of the IMF's *Balance of Payments Manual (BPM*5)[3] describes the conceptual framework that underlies balance of payments statistics. *BPM5* contains recommendations for the definition, valuation, classification, and recording of resident/non-resident trade in services.

The *BPM5* statement systematically summarizes, for a specific time period, transactions that take place between an economy and the rest of the world. Transactions, for the most part between residents and non-residents, consist of those involving goods, services and income; those involving financial claims on, and liabilities to, the rest of the world; and those (such as gifts) that are classified as transfers.

A transaction itself is defined as an economic flow that reflects the creation, transformation, exchange, transfer or extinction of economic value and involves changes in ownership of goods and/or financial assets, the provision of services, or the provision of labor and capital. To capture accurate and reliable trade in services statistics, the BPM5 framework needs to elaborate its classification of transactions by type of service to form the Extended Balance of Payments Services (EBOPS).

The Central Product Classification

The UN *Central Product Classification (CP*C)[4] is a part of the international system of interrelated classifications of economic activities and products (i.e., goods and services). It is the standard for all products that are an output of an economic activity, including transportable and non-transportable goods and services.

For the description of goods, the *CPC* is fully harmonized with the Harmonized Commodity Description and Coding System (HS) of the World Customs Organization (WCO). For services, the *CPC* is the first international classification covering the whole spectrum of outputs of the various industries, and it can serve the different analytical needs of statistical and other users.

For example, the provisional version of the *CPC* has been used for the elaboration of the categories of services that were used during the negotiations leading to the GATS, which were conducted during the Uruguay Round. The *CPC* has also been used to describe the balance of payments services components recommended in *BPM*5. The general service product classification of the *CPC* will serve as a guideline for the elaboration of such classifications for specific areas of the economy, including international trade in services.

International Standard Industrial Classification of All Economic Activities

The UN *International Standard Industrial Classification of All Economic Activities—Revision 3 (ISI*C)[5] is a basic tool for fostering international comparability of data across a wide range of economic and social statistics, including production, value added, employment and other economic statistics. It is a standard classification of productive economic activities linked with the way economic processes are organized in units.

An industry is thus defined as the set of production units engaged primarily in the same or similar kinds of productive economic activity. Criteria relating to the economic transactors (e.g., financial institutions) and to types of transaction (intermediate and final consumption, capital formation, etc.) reinforce the considerations for identifying stages of production. In line with the UN program of harmonization of international economic classifications, the *ISIC* categories are correlated with those of the *CP*C.

International Merchandise Trade Statistics

The UN publication "International Merchandise Trade Statistics: Concepts and Definitions, Revision

[3] International Monetary Fund, *Balance of Payments Manual—Fifth Edition* (Washington, D.C.), 1993

[4] United Nation*s, Central Product Classification—Version 1.0, Series M, No. 77* (New York), 1998.

[5] United Nations, International Standard Industrial Classification of All Economic Activities—Revision 3, Series M, No. 4 (New York), 1990.

2" (IMTS2)[6] contains the revised recommendations of the Statistical Commission regarding statistics of international merchandise trade. The implementation of these recommendations will result in data that better meet the needs of a variety of national and international users and that are more comparable with other statistics compiled in the framework of the *1993 SNA* and *BPM*5.

The IMTS2 provides a brief description of flows of goods between residents and non-residents that are not covered by merchandise trade statistics and identifies those services, the value of which is included in the value of imported and exported goods.

International migration frameworks and the UN Recommendations on Statistics of International Migration

The UN recommendations[7] set out a framework for reporting statistical information that measures international migration flows and stocks, including how population censuses can help gather information on foreign persons.

The framework builds on the taxonomy of traveler inflows and outflows, and it gives priority to the identification of internationally mobile individuals who satisfy simple general definitions of short-term and long-term migrants. The recommended period of stay for inclusion among the former is three months, and for inclusion among the latter a year or more. Persons staying for periods shorter than three months are not included in these recommendations.

Thus, this use of the term migrant is somewhat broader than that in *BPM*5, where an actual or intended stay of a year or more is required. For a fuller taxonomy of migrants and other travelers, see page 33 of the UN Recommendations. An ILO publication[8] provides an extensive discussion on sources of migration statistics.

Tourism Satellite Accounts

Eurostat, the World Tourism Organization, the OECD and the UN have developed *Tourism Satellite Account: Methodological References*[9], which sets out a framework to measure the contribution of tourism to an economy in an internationally comparable way. The *Tourism Satellite Account (TSA*) respects the definitions and norms of *1993 SNA* where relevant. Balance of payments data on travel, excluding business travel, are one source of data on a part of tourism as defined in the *TSA*. The *TSA* framework allows for a breakdown of visitors' expenditure in a way that may be useful for the GATS, for example, disaggregating visitors' expenditure on goods, hotels, and restaurants, or disaggregating visitors' expenditure by resident and non-resident visitors. The *TSA* also provides lists of tourism specific products with *CPC* links.

The Joint OECD-Eurostat Trade in Services Classification

The Joint OECD-Eurostat *Trade in Services Classification*[10] (referred to as the Joint Classification) is closely linked to the *BPM*5. It can be characterized as a disaggregation of the *BPM5* classification for balance of payments transactions in trade in services. It covers all service transactions between residents and non-residents.

The main categories of this classification are identical to the 11 main service categories of the *BPM5* standard components, and the two-, three-, and four-digit items are compatible with these standard components and *BPM5* services sub-

[6] United Nations, International Merchandise Trade Statistics: Concepts and Definitions—Series M, No. 52, Revision 2 (New York), 1998.

[7] United Nations, *Recommendations on Statistics of International Migration—Revision 1, Series M, No. 5* (New York), 1998.

[8] R.E. Bilsborrow, Graeme Hugo, A.S. Oberai, and Hania Zlotnik, *International Migration Statistics: Guidelines forImproving Data Collection Systems* (Geneva: International Labor Organization), 1997.

[9] Eurostat, Organisation for Economic Co-operation and Development, World Tourism Organization, and United Nations, *Tourism Satellite Account: Methodological References* (Brussels/Luxembourg, Madrid, New York, Paris), 2000.

[10] Organisation for Economic Co-operation and Development and Eurostat, "OECD-Eurostat Trade in Services Classification—Revision 2 (21 October 1996)", Appendix 1, *OECD Statistics on International Trade in Services (a joint publication of OECD and Eurostat)* (Brussels/Luxembourg and Paris), 2000. This Joint Classification may also be found at the following Internet address: http://www.oecd.org/std/TISclass.pdf.

components, with one minor exception, the treatment of construction services, which also affects other business services.

The Joint Classification asks for data on *construction abroad* and *construction in the compiling economy*. Both of these items include goods and services purchased by construction services operations, while *BPM5* recommends that these expenditures for goods and services purchased in the host economy be included in *other business services, other*. With this one exception, compiling and reporting on the basis of the Joint Classification simultaneously satisfies IMF requirements. The Joint Classification is also partially linked to the *CPC* through its relationship with the *BPM5*.

The Joint Classification represents a first attempt to take account of the GATS, particularly as regards financial services and telecommunications, and it also reflects the statistical implications of the completion of the European Communities' Single Market in Services, which entailed a great number of directives relating to financial, telecommunications, transport, tourism, and audiovisual services.

The OECD Benchmark Definition of Foreign Direct Investment

Foreign direct investment has assumed a crucial role in the internationalization of economic activities. The *OECD Benchmark Definition of Foreign Direct Investment—Third Edition (BD3)*[11] provides operational guidance, within the conceptual framework of *BPM5* and as an elaboration of it, on how foreign direct investment data should be compiled to meet internationally agreed standards.

The OECD Manual on Globalization Indicators

The proposed *OECD Manual on Globalization Indicators* will provide a framework of methodological and statistical guidelines for constructing indicators on an internationally harmonized basis of use for policy makers and for the systematic monitoring over time of the progressive degree of worldwide economic integration. The GATS obligations relate to many aspects of the presence of enterprises established abroad, which supply services through Mode 3, *commercial presence*.

FATS statistics provide information on the activities of majority-owned foreign affiliates. It is expected that the OECD manual will cover a wider canvas than FATS statistics.

International Best Practices in Services Data Collection—A Case Study of the United States[12]

The Bureau of Economic Analysis (BEA)–a statistical agency within the U.S. Department of Commerce–is the U.S. Government agency with the primary responsibility for collecting and disseminating data on U.S. international sales and purchases of services. BEA's core mission is to compile the nation's economic accounts.

Among the statistical systems that it maintains are the national income and product accounts, the international transactions (balance of payments) accounts, the input-output accounts, a regional economic information system, and an information system dealing with U.S. multinational companies and with foreign-owned companies operating in the United States. For the most part, BEA does not itself collect the data it uses, but obtains it from other government agencies, private sources, and–in a few cases–data exchanges with foreign statistical offices or from international organizations. However, it is a primary data collector in the area of trade in services, including both data on cross-border trade and data on services delivered through affiliates.

All of the surveys conducted by BEA are mandatory under a law known as the International Investment and Trade in Services Survey Act.

[11] Organization for Economic Co-operation and Development, *OECD Benchmark Definition of Foreign Direct Investment–Third Edition* (Paris), 1996.

[12] Whichard, Obie. *United States Statistics on Trade in Services,* Bureau of Economic Analysis, U.S. Department of Commerce, report prepared for the APEC Seminar on Statistical Reporting on Service Trade, August 2000.

Among its provisions, this act requires the periodic collection of data on trade in services, makes reporting mandatory for U.S. businesses that engage in international services trade, and provides that the data reported will be held confidential and used for statistical purposes only. Under the last provision, the data reported cannot be used for other purposes, such as regulation, taxation, or investigation. Thus, firms must respond to the questionnaires, but they do so in the knowledge that others have to do the same and that their responses will be held confidential and cannot be used in any legal proceeding. The act has existed in essentially its present form since 1984, when legislation authorizing the collection of data on international investment was broadened to cover trade in services as well.

A second law governing the collection of data on trade in services (as well as on other topics) is the Paperwork Reduction Act of 1995. Under this act, U.S. Government surveys must undergo an approval process in which the agency collecting the data is required to demonstrate to the approving authority–the Office of Management and Budget–that the data are necessary, that they cannot be obtained from an existing source, and that their collection does not place an unreasonable burden on respondents. The act requires that proposals to collect information be publicly announced and that the public be invited to comment on, among other things, the necessity of the collection and the accuracy of the agency's estimate of respondent burden. Normally, approval of a given survey must be renewed every 3 years.

It is within the context of these laws–and within the additional constraint of its own budget–that BEA conducts its surveys of international services.

There are two types of surveys that BEA carries out. One is a benchmark survey–essentially a census–and the other is a sample survey benchmark surveys are usually conducted every five years. They have lower reporting thresholds than the sample surveys and usually are more detailed in terms of the items covered. For periods not covered by a benchmark survey, estimates for data reported only on the benchmark survey are derived by extrapolating forward the data reported on the benchmark survey, based on growth in the data reported on the sample surveys. This approach is used for financial services, for a group of "selected" (mainly miscellaneous business, professional, and technical) services, and for all of the direct investment surveys.

Both types of surveys are usually paired and used together in obtaining the volume of trade in services in the United States. This pairing of benchmark and sample surveys allows estimates covering the universe of transactions to be produced for all periods, while reducing respondent burden and processing costs below those that would otherwise be required.

While the BEA surveys provide a large share of the U.S. data on trade in services, other sources are used as well, sometimes in conjunction with BEA survey data. In some of these cases, one source is used to obtain a unit value or per capita amount, which is then multiplied by a volume measure obtained from another source to derive an estimate of the total dollar value of the transactions.

For example, estimates of expenditures by air travelers are derived by multiplying a sample-based estimate of expenditures per traveler, obtained from an in-flight survey conducted by the International Trade Administration of the Department of Commerce, by figures on the total number of travelers obtained from the U.S. Immigration and Naturalization Service. Estimates of transactions in education services are similarly derived through multiplication of per capita figures on tuition and student living expenses by figures on the total number of U.S. students studying abroad or foreign students studying in the United States; the data used to derive the estimates are obtained from a variety of outside sources.

BEA has taken a number of steps to improve the accuracy, comprehensiveness and detail of its data on trade in services. These steps have put BEA at the forefront of data collection. A few of most important improvements BEA has made include:

- Improving conformity to BPM5
- Improving classification by increasing the number of sectors added to surveys
- Improving methodologies and presentation of data (i.e. record trade in services between affiliated enterprises on a gross basis, not on a net basis)
- Increasing efforts to use outside source data to develop estimates of services that are not covered by BEA's own surveys
- Improving the definition and presentation of services in the current account by adding a new subtotal for services
- Reclassification of operational leasing and computer software royalties and license fees.

Despite the numerous steps BEA has taken to increase the coverage and accuracy of its trade in services data, resource constraints or source data limitations have precluded one hundred percent conformity to international standards.

Next steps

It is important to remember that when seeking to augment statistical information on trade in services, national agencies need to weigh the demand of users for more detail about services trade against the cost of collection, the burden of extra information provision on business, and the need for certain minimum quality thresholds. These constraints and considerations limit in a very real sense the amount of detail on international trade in services that it is practical to provide. If governments are interested in increasing the availability and improving the reliability of data for trade in services, they may wish to consider the following recommendations.

- Weigh the cost benefits of assigning resources to collect data
- Identify if there are human resources that can be dedicated to services data collection
- Identify whether training is necessary for the statistical compilers
- As statistics on trade in services are developed, close cooperation will be required among the institutions involved. There will be a need to build consensus and gain support among the various government agencies (central banks, national statistical offices, and government ministries) on the need to focus on increased data collection
- Identify services data experts to conduct training workshops on the need for and how to develop a services data collection program (SDCP).
- Conduct workshops with international data collection experts.
- Services data experts will produce a report that will assess current capabilities of Indonesia with regards to services data collection and outline what steps are necessary for increased data collection.